



# HURRICANE DORIAN BRIEFING

8:00 AM EDT

Wednesday, September 4, 2019

Prepared by:  
*WFO Jacksonville FL*

**For Emergency Management Use Only!**



NWSJacksonville

[www.weather.gov/jax](http://www.weather.gov/jax)

# Key Messages

## Hurricane Dorian



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- ***Highest area of concern of overall concern remains from Ponte Vedra Beach southward but the entire coast continues to be threatened.***
- ***Life threatening waves/Breakers of 12 to 16 feet on the outer sandbar and 7 to 10 feet beaches***
- ***Tropical storm (39 to 57 mph) to strong tropical storm (58 to 73 mph) conditions along the beaches, backed by a category 2 hurricane offshore, along with wave run up, is likely to produce significant surge possibly 3 to 5 feet AGL oceanfront 2 to 4 feet AGL Intracoastal.***
- ***Localized bay/sound side areas on Amelia Island, St Andrews Sound and Saint Simons Sound to 6 feet with sound side flooding.***
- ***Track and wind envelope size remain the determining factors. We will be watch events in central Florida closely for trends with respect to winds, surge and wave action.***

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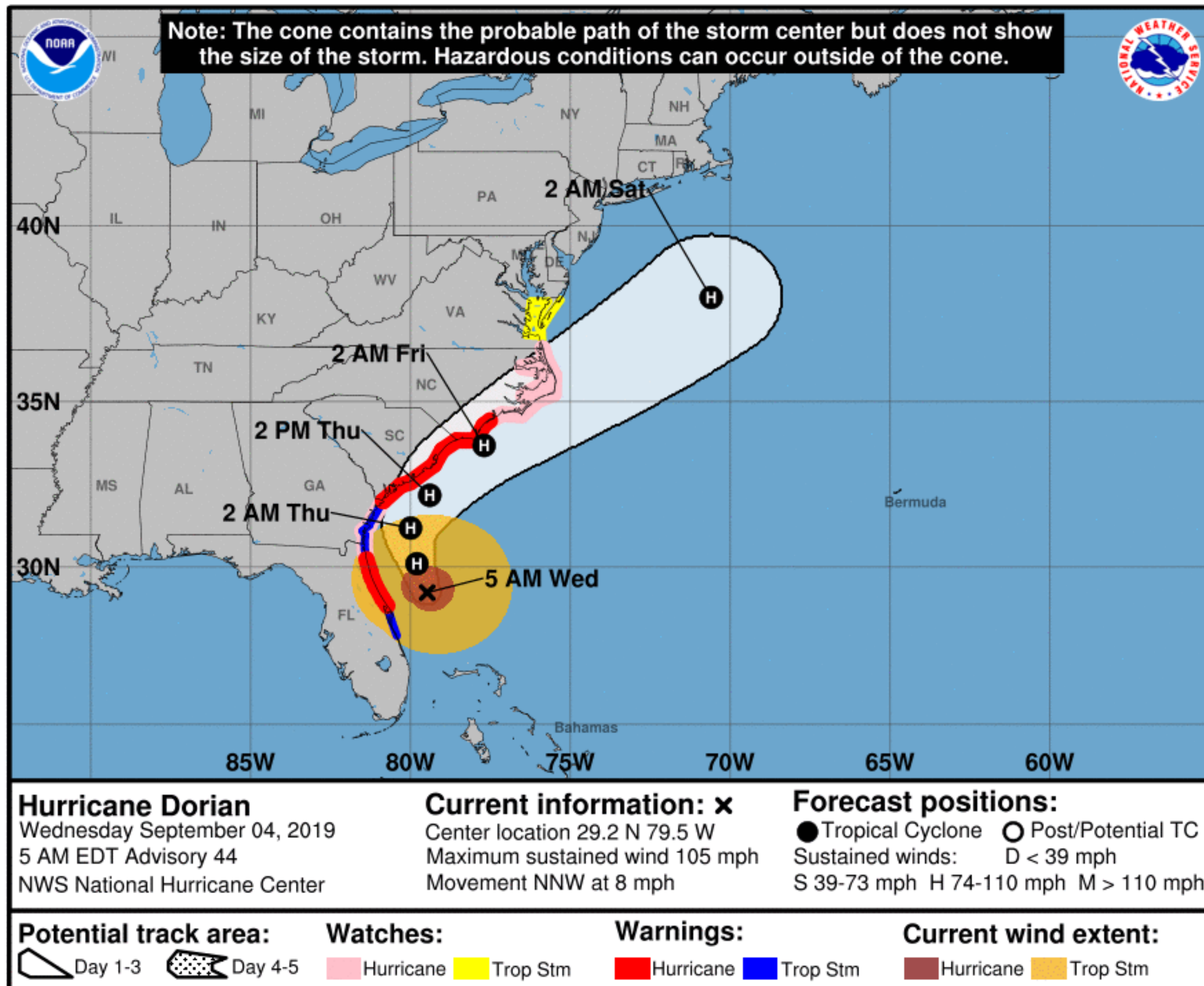


# Situation Overview

## Hurricane Dorian



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**NOTE:** Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

## New Information

- Dorian NUDGED a bit west
- Tropical storm warnings for Wayne, Brantley and eastern Charlton.

## Concerns

- Damaging/life threatening surf
- Coastal surge, Generally 3 to 5 feet ocean and 2 to 4 feet Intracoastal, Locally higher on bays and sounds near inlets.
- Tropical storm to strong tropical storm force winds, Possible hurricane gusts for Glynn County and Cumberland Island.
- Potential St Johns River flooding for north and northwest facing creeks & choke points

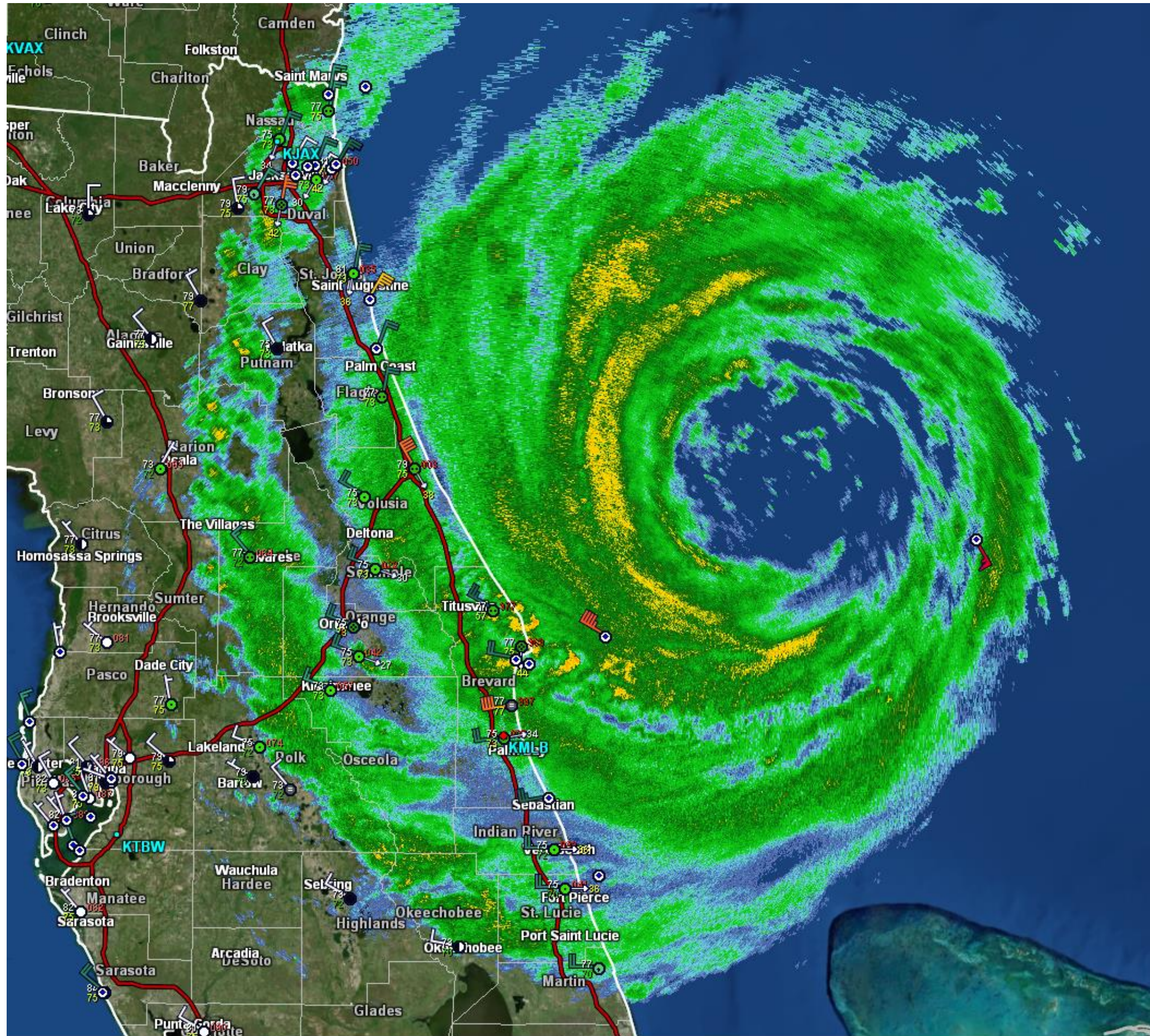


# Radar Depiction

## Hurricane Dorian



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- Dorian's western eye wall better established.
- Tropical storm force winds are being felt along the beaches near Daytona Beach.
- Dry air mixing into the system is expected to bring the strongest winds and gusts **AFTER** the center has passed to your north. In the ***southwestern quadrant*** of the storm.
- Don't let your guard down after the center has moved north of you.

**NOTE:** Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

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# Surf / Breakers

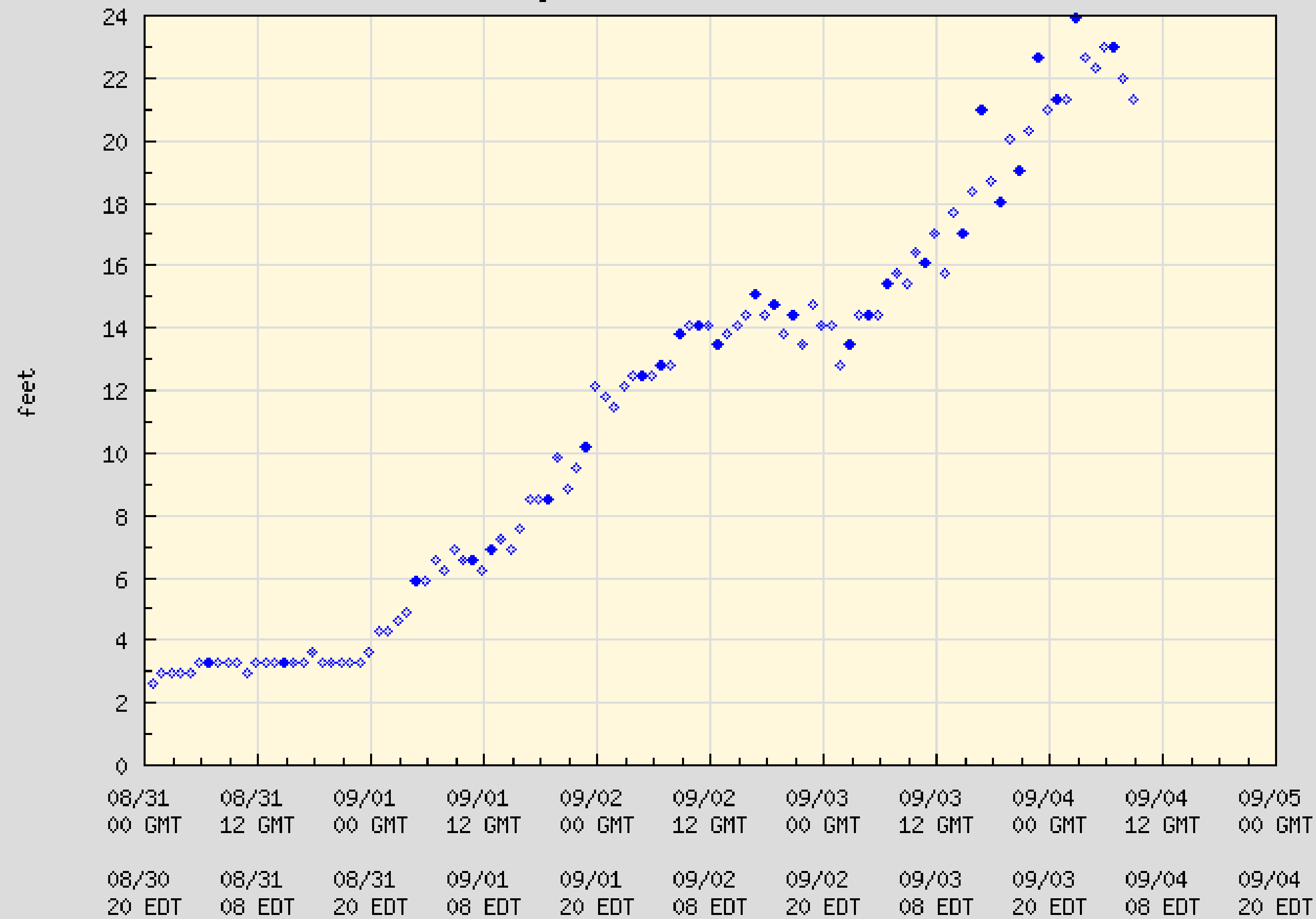
Hurricane Dorian



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Wave Height at 41009

Image Credit: NOAA/NWS/NDBC



- The deep water waves off Cape Canaveral only peaked at 24 feet.
- Based on that 12 to 16 feet breakers on the outer sand bar.
- 7 to 10 on the actual beaches
- Remember that is 7 to 10 foot waves riding on top of a 3 to 5 foot surge
- Still will reach vulnerable infrastructure

**NOTE:** Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

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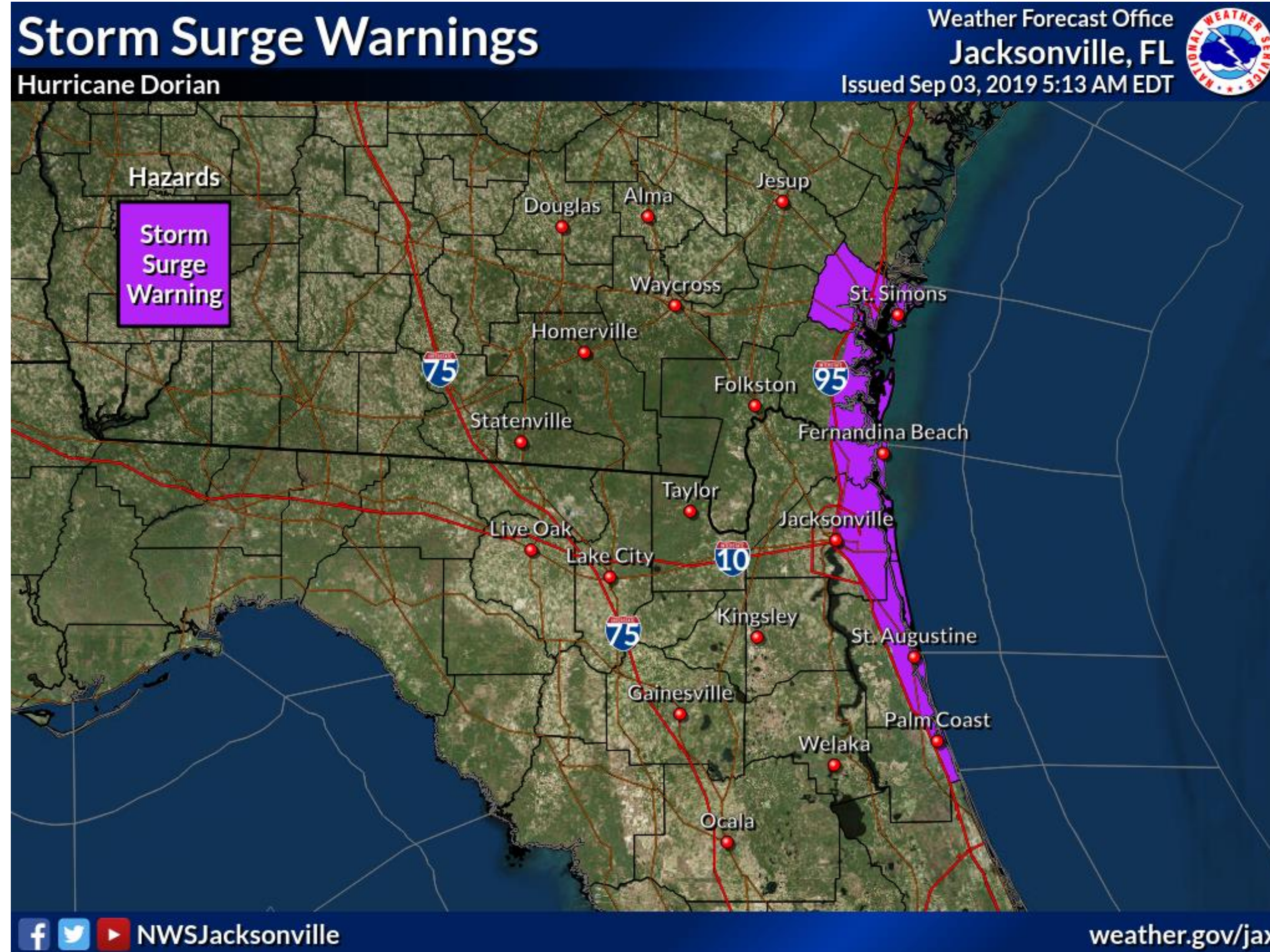


# Storm Surge Warning

Hurricane Dorian



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- Storm Surge Warning in effect for the Beaches and Intracoastal Water Way (ICWW) from the Altamaha River south to Flagler Beach
- Possibility/danger of life-threatening inundation from storm surge somewhere in the specified area within 36 hours.



# Hurricane Watches and Warnings

Hurricane Dorian



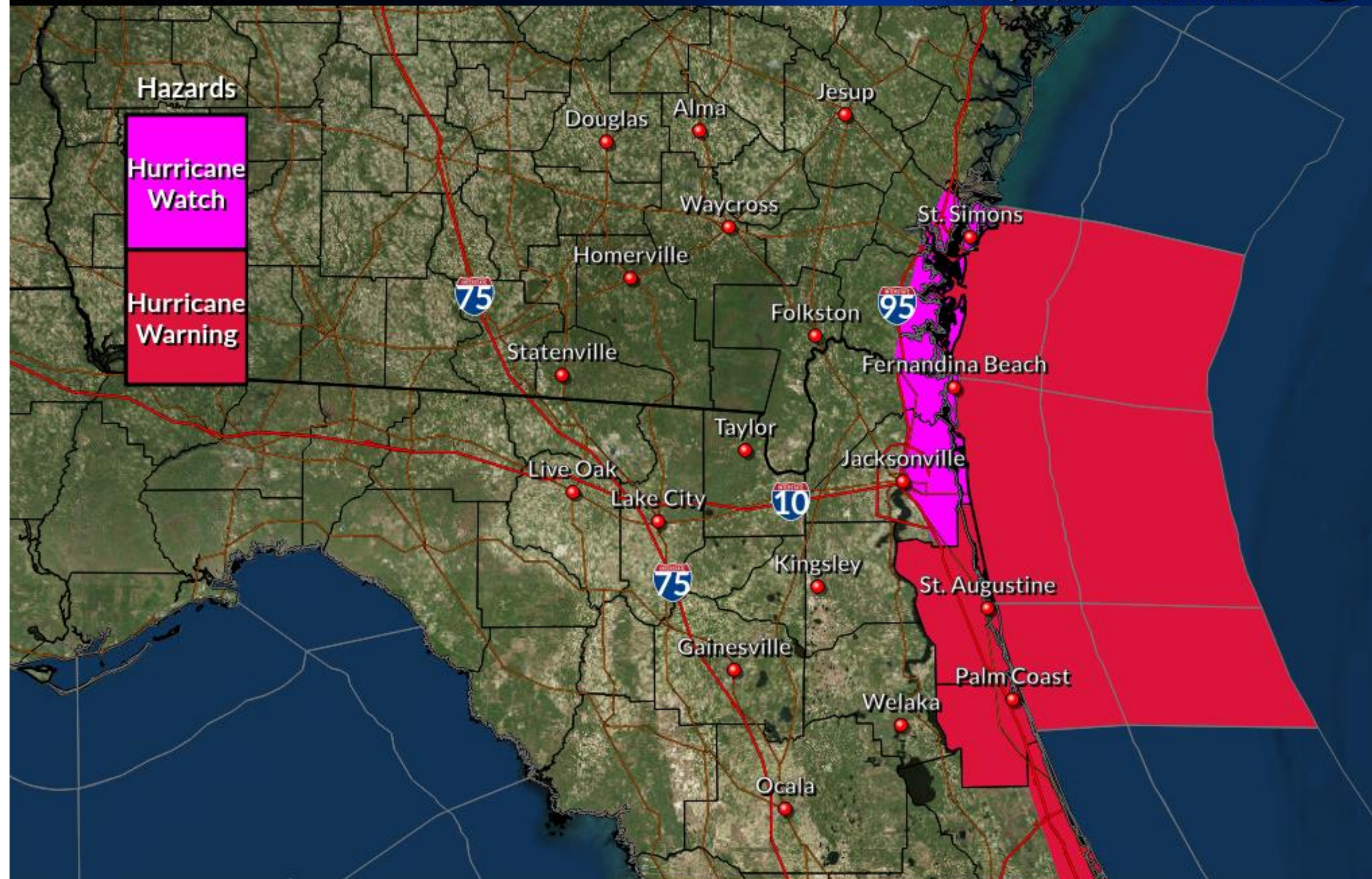
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## Hurricane Watches and Warnings

Hurricane Dorian

Weather Forecast Office  
Jacksonville, FL

Issued Sep 03, 2019 5:12 AM EDT



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### Hurricane Warning in effect for...

- St Johns and Flagler Counties
- Coastal waters.

### Hurricane Watch in Effect for...

- Coastal areas from South Jacksonville Beach to Sea Island.
- Ports of Brunswick, Fernandina, and Jacksonville



# Tropical Storm Warning

Hurricane Dorian



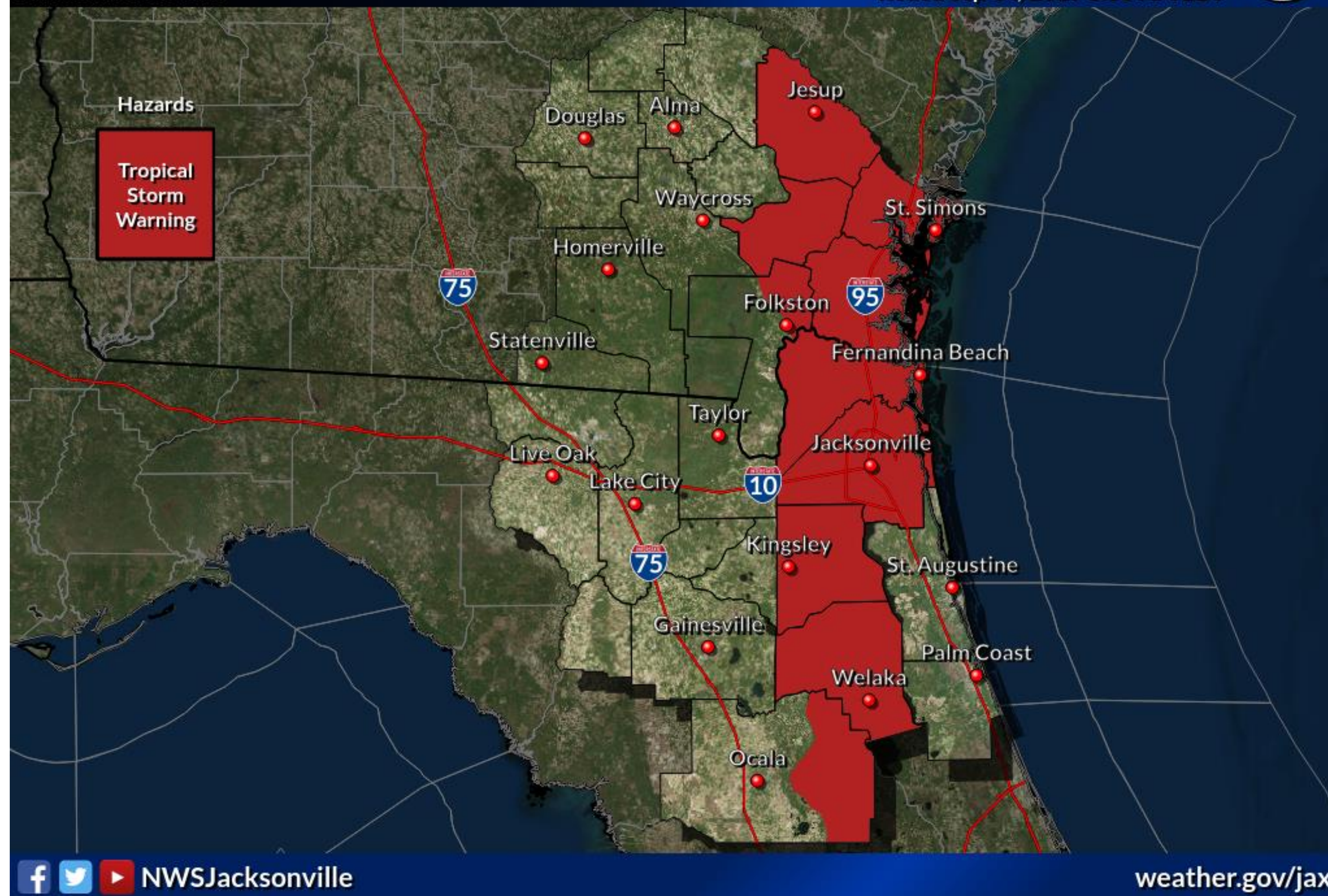
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## Tropical Storm Warnings

Hurricane Dorian

Weather Forecast Office  
Jacksonville, FL

Issued Sep 04, 2019 6:56 AM EDT



## Tropical Storm Warning in effect for...

- Coastal counties from Duval County to Glynn County
- Ports of Brunswick, Fernandina and Jacksonville
- **Eastern Marion County east of the Ocklawaha River will be dropped at 8:00 a.m.**
- Clay, and Putnam counties, mainly for areas immediately near the St Johns River.



# Most Likely Sustained Winds

Hurricane Dorian



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## Hurricane "Dorian" Expected Winds

Wednesday, Sept 4th, 2019, 5 a.m. EDT

Jacksonville

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### Potential Wind Threat

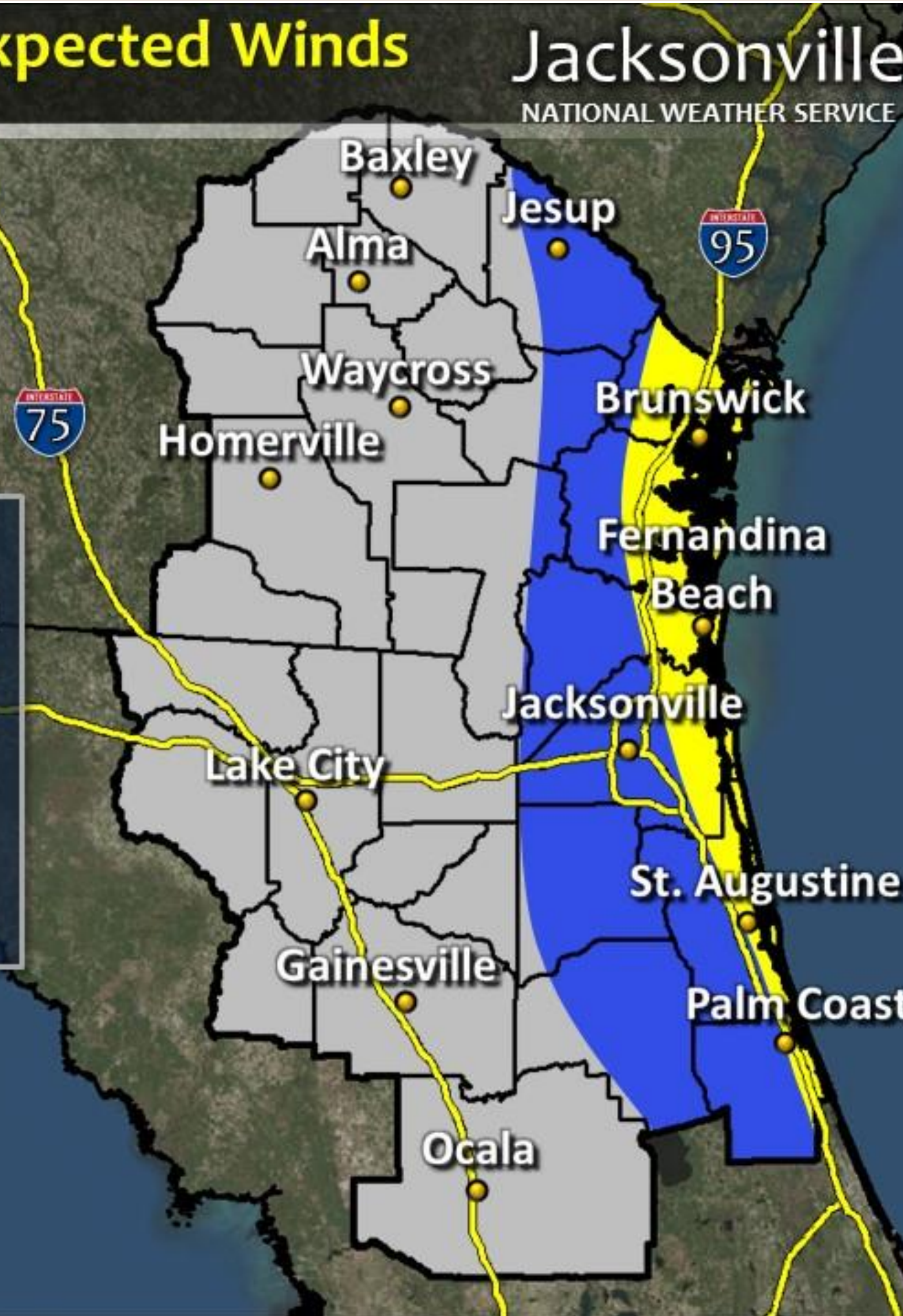
59 to 73 mph

39 to 58 mph

Less Than 39 mph

### Caveats

- This forecast is dependent upon a track 60 to 80 miles offshore and an exact NHC wind field forecast!
- Any track further inland would increase wind speeds, possibly substantially
- Refer to following Wind Gust side for potential wind gusts.



Graphic Last Updated:

5:40 am September 4, 2019

- Tropical Storm Force winds along the and larger exposed areas of the St Johns River and Crescent Lake.
- ***BUT we will not realize these wind speeds in all areas***
- Will not see continuous winds to these speeds...
- ...rather the peak winds will come with bands rotating around the system as it moves by us.

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# Most Likely Wind Gusts

Hurricane Dorian



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## Hurricane "Dorian" POTENTIAL Gusts

Wednesday, Sept 4th 2019, 5 a.m. EDT

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### Potential Wind GUSTS

Hurricane Force

58 to 73 mph

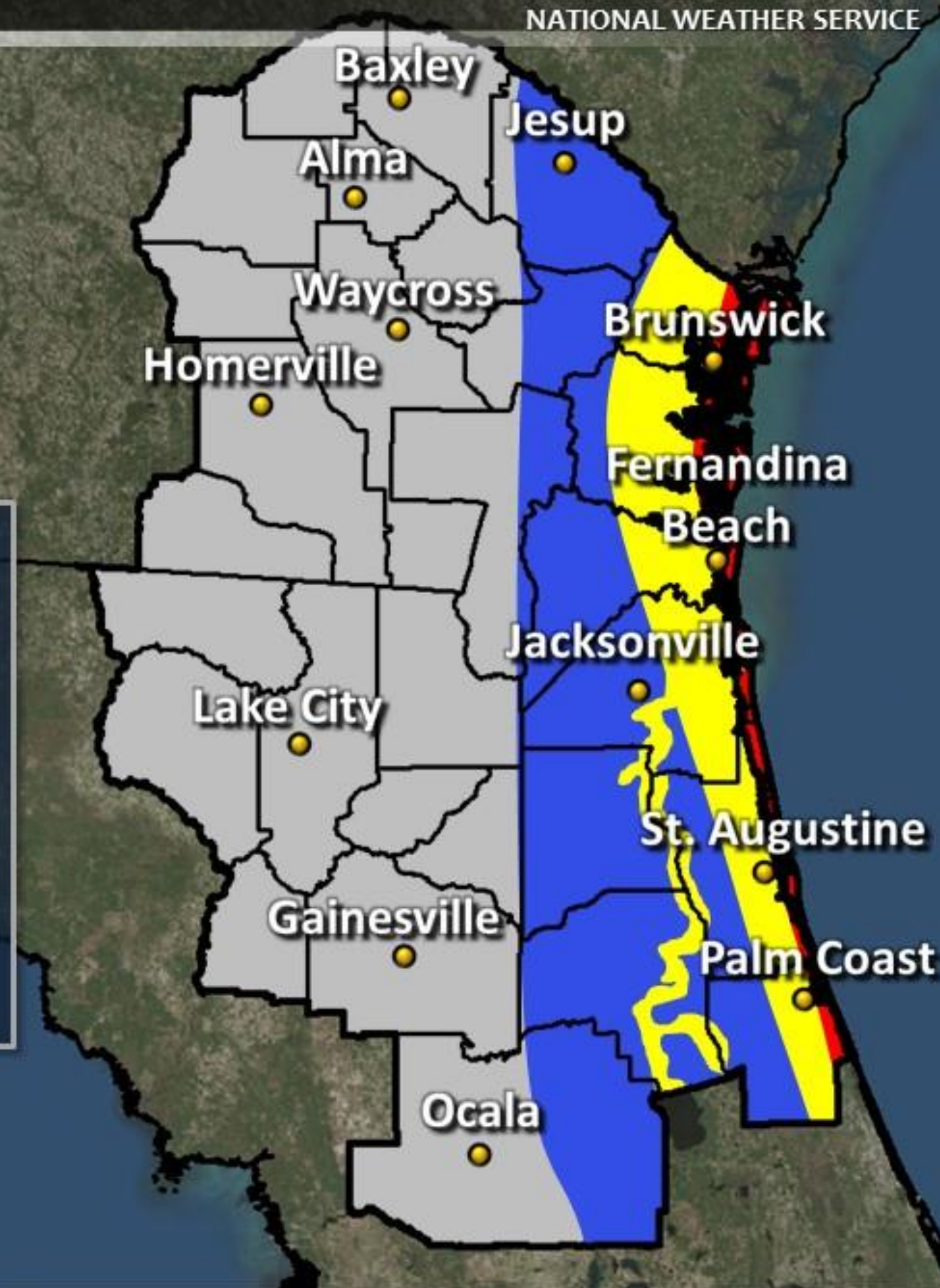
39 to 58 mph

Less Than 39 mph

### Caveats

- This forecast is dependent upon a track 60 to 80 miles offshore and an exact NHC wind field forecast!
- Any track further inland would increase wind gusts, possibly substantially
- Hurricane force gusts are most likely for Cumberland Island and Glynn County, GA.

Graphic Last Updated:  
5:45 am September 4, 2019



- Hurricane force wind gusts (red) are **POSSIBLE** for the Immediate coast and Intracoastal Waterway. Best chance Cumberland Island and Glynn County.
- Strong tropical storm force wind gusts are in yellow. Particularly in JAXPort, Port of Fernandina and Cumberland/St Andrews Sounds.
- Wind gusts less than 58 mph elsewhere (blue).

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# Flooding Rain Threat

Hurricane Dorian

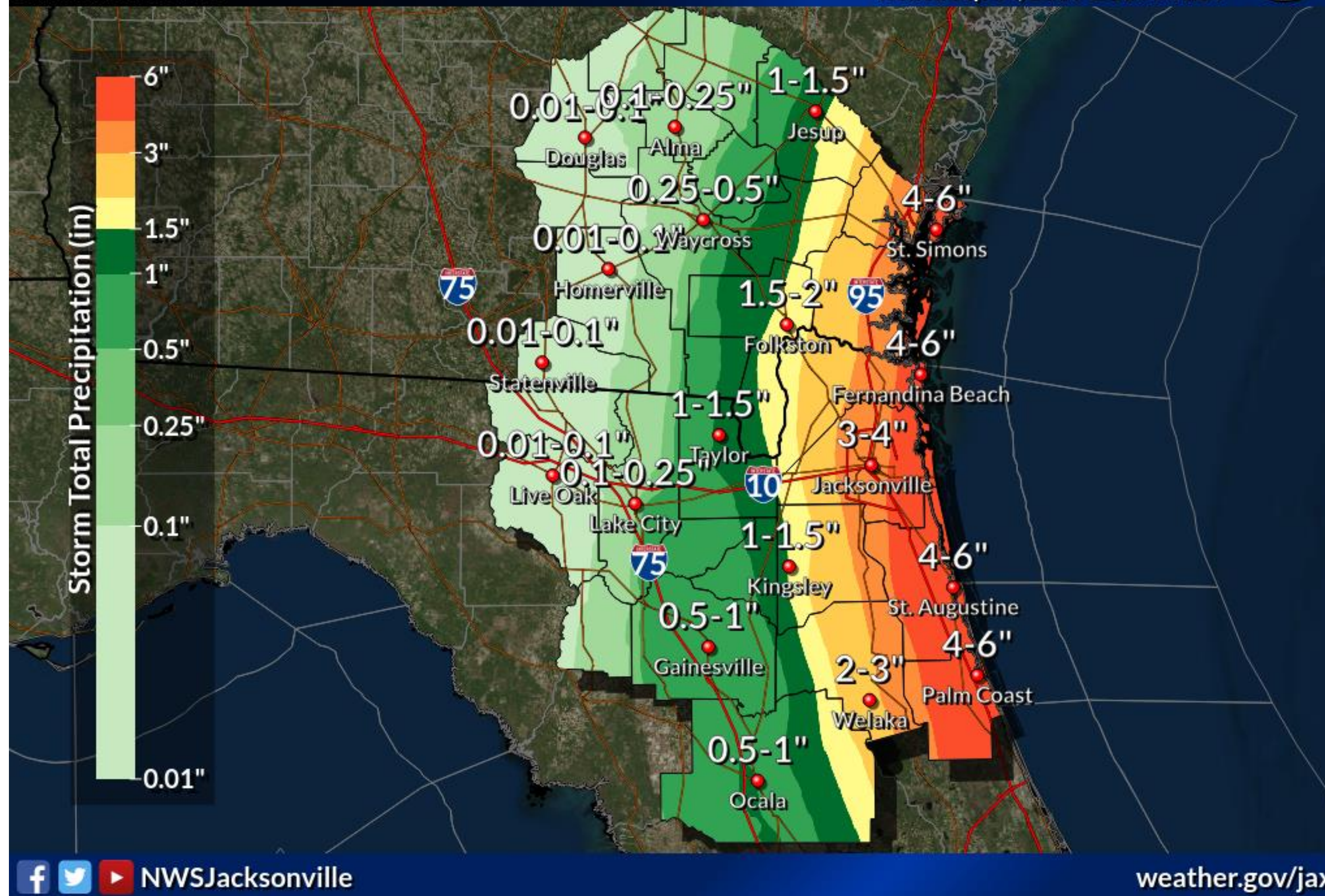


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## Forecast Rainfall Amounts

Hurricane Dorian

Weather Forecast Office  
Jacksonville, FL  
Issued Sep 04, 2019 5:11 AM EDT



- 4 to 6 inches for the coastal areas.
- 3 to 4 inches other coastal areas and St Johns River areas.
- 1 to 3 inches near Black Creek.

Locally Higher Amounts are POSSIBLE.

### Flooding Rain Threat

Potential for extreme flooding rain	Potential for major flooding rain	Potential for moderate flooding rain	Potential for localized flooding rain	Little to no potential for flooding rain
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# Storm Surge Threat

Hurricane Dorian



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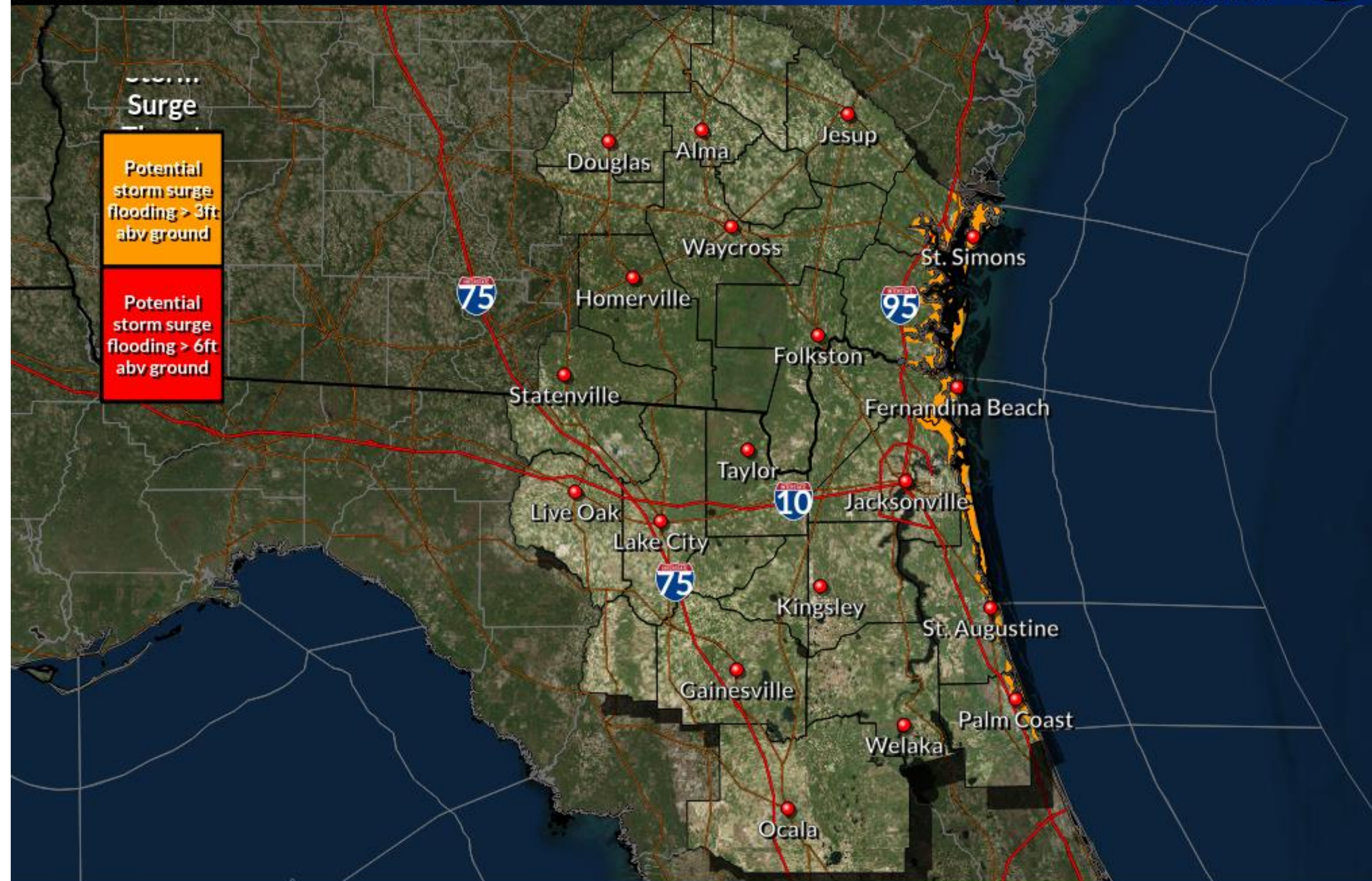
## Storm Surge Threat

Hurricane Dorian

Weather Forecast Office

Jacksonville, FL

Issued Sep 04, 2019 5:09 AM EDT



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- High along the ocean front locations and larger rivers immediately near the coast with 3 to 5 foot Above Ground Level (AGL) Surge POSSIBLE.
- 2 to 4 Feet AGL on portions of the Intracoastal Waterway POSSIBLE.
- **Localized** sound side flooding of 5 to 7 feet is possible...
  - Egans Creek
  - Tiger Point Marina
  - Fernandina Harbor Marina
  - F.J.Torras Causeway
  - Jekyll Island ICWW Side
  - SSI:The Village/Neptune Park

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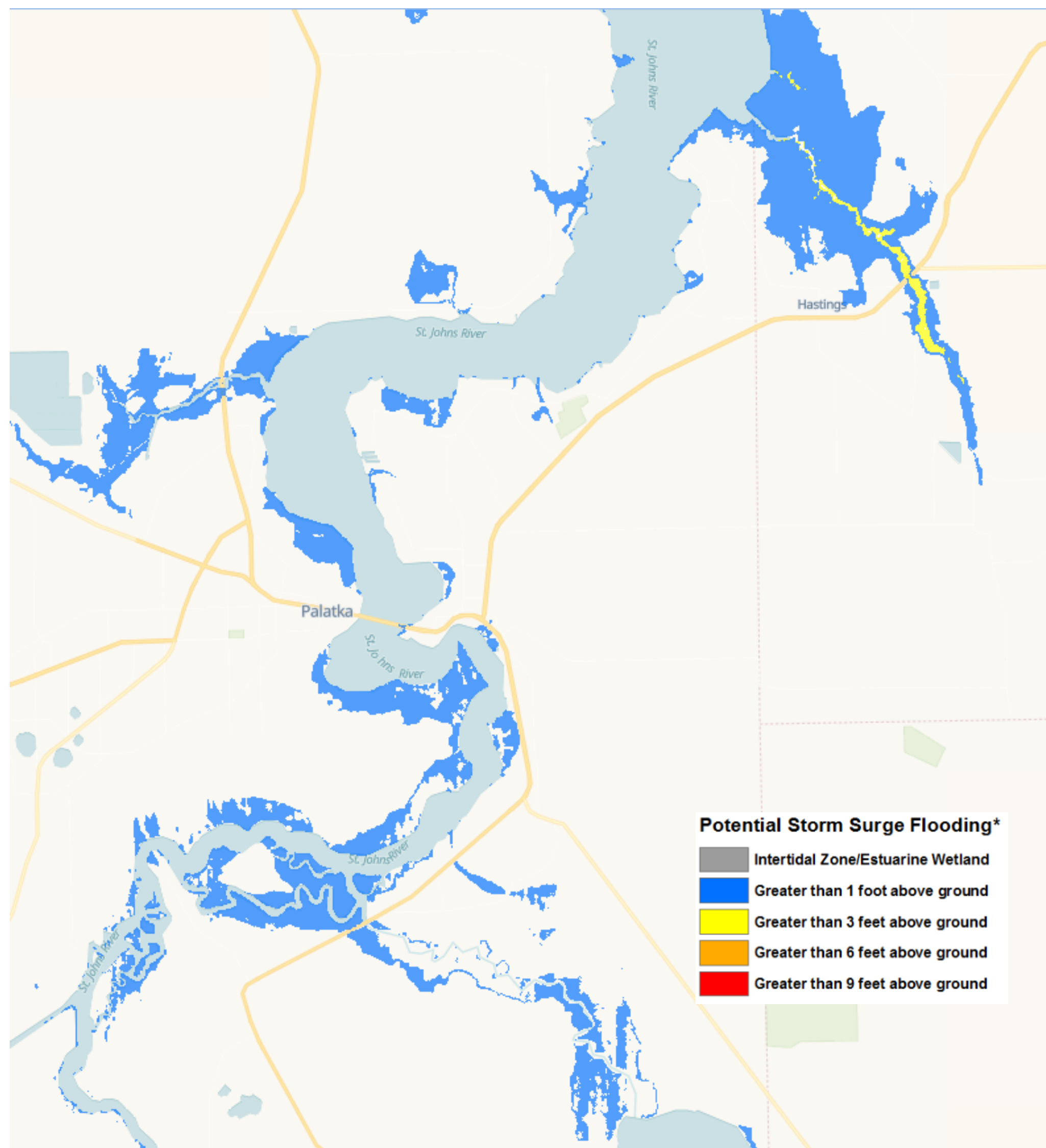


# Potential St Johns River Flooding

Hurricane Dorian



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- Deep Creek, Hastings and Federal point possibly 3 to 3.5 feet Above Ground Level (AGL) with any track further west. More likely 2 to 3 feet AGL with current track.
- Dunns Creek, San Mateo, 2 to 3 feet AGL.

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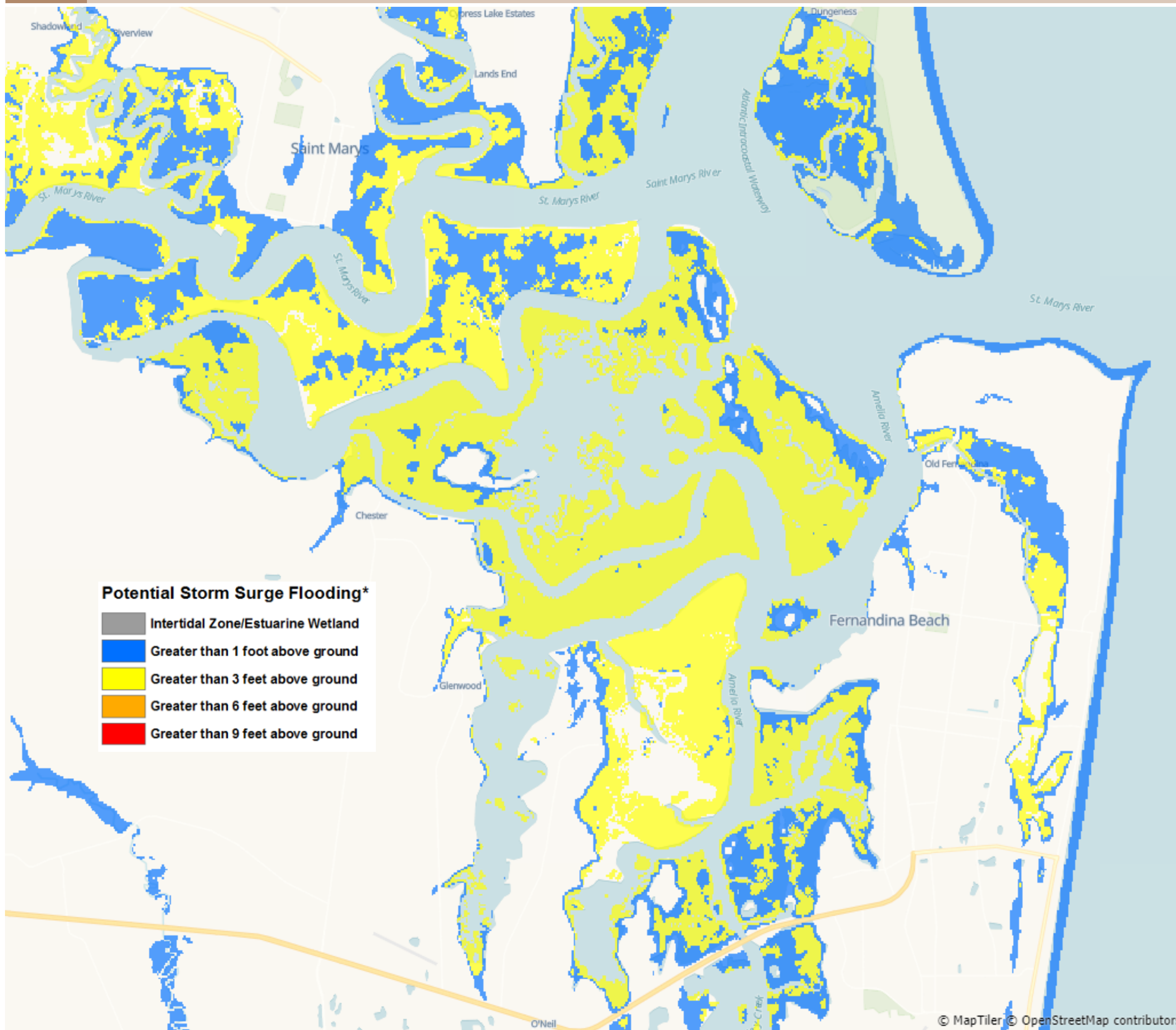


# Amelia Island

## Hurricane Dorian



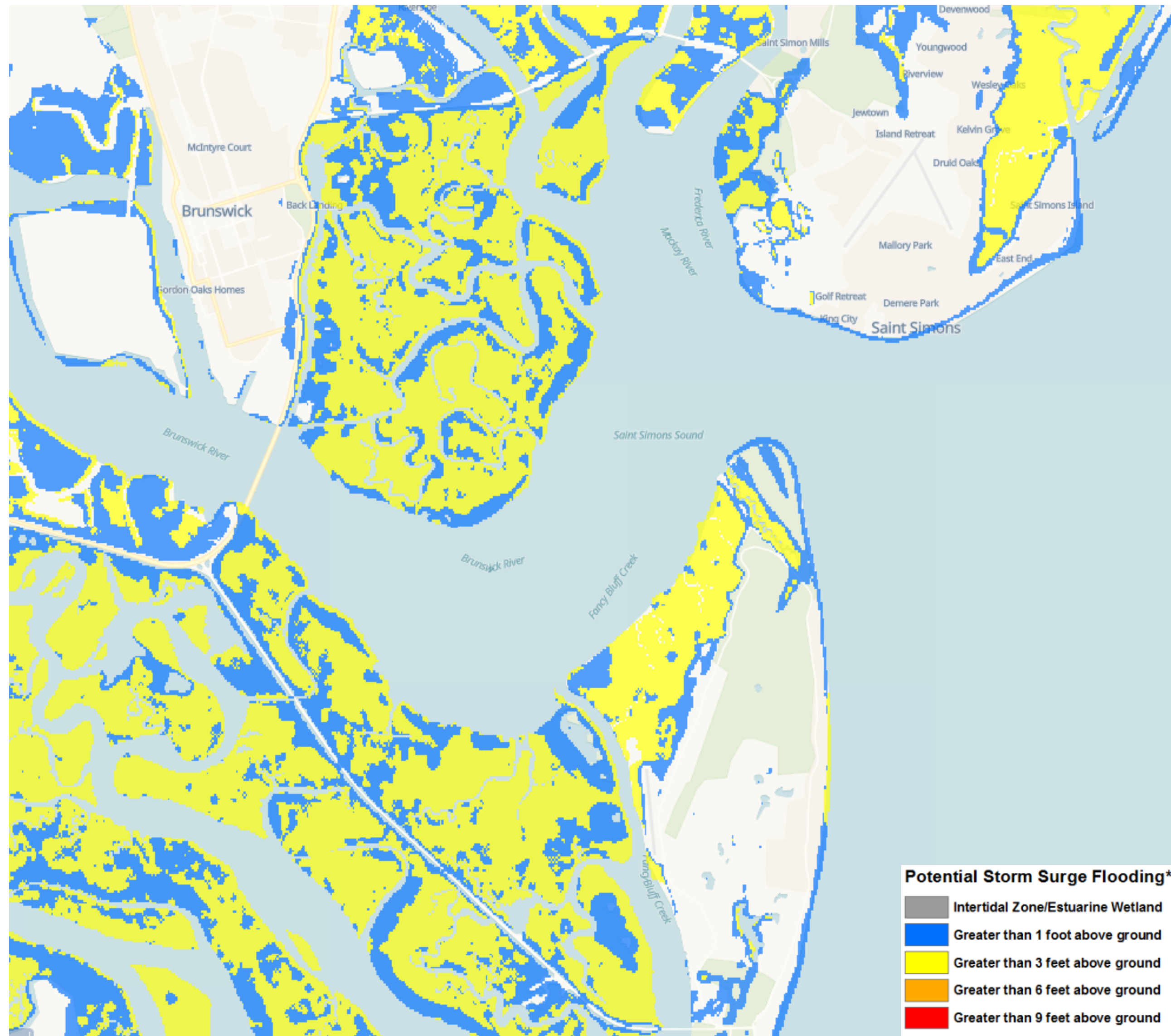
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- LOCALLY to 6 feet AGL.
- Fernandina Harbor Marina
- Tiger Point Marina
- Port of Fernandina
- Egans Creek (best chance of reaching 6 feet AGL).

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- LOCALLY 4 to 6 feet AGL.
- Village and east beach on marsh
- Jekyll Island on ICWW Side
- Coffin Park/Lanier Blvd area
- Marshside
- F.J.Torras and the Jekyll Island causeways along with South Beach Parkway are likely to be impassable between 11 a.m. and 3 p.m. due to spray and inundation.

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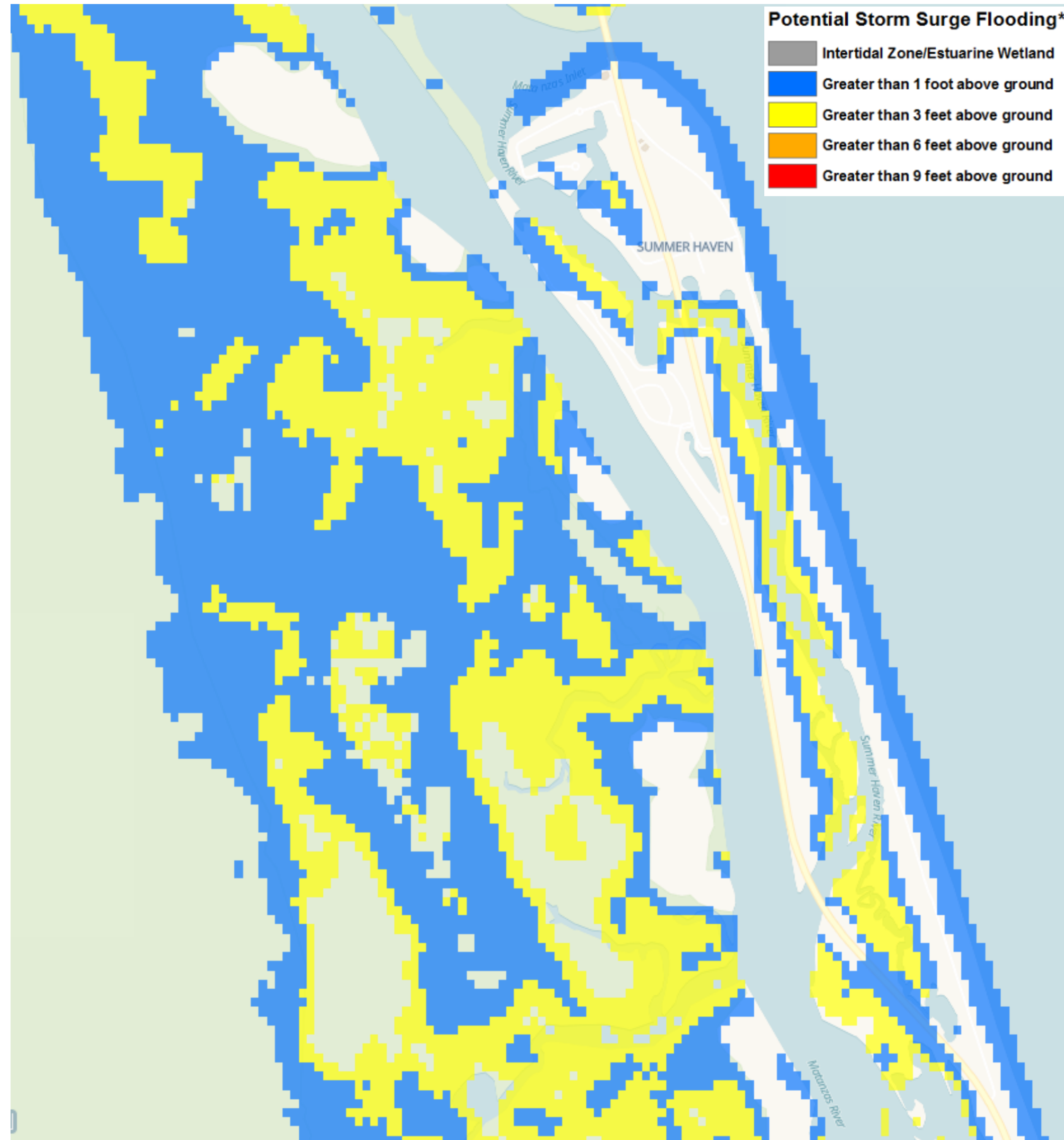


# Matanzas and Summerhaven

Hurricane Dorian



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- Generally 3 feet AGL Oceanfront, but some locally higher spots possible.
- 3 to 4 feet AGL on Intracoastal side of Summerhaven.
- If higher values occur they will be near Matanzas Inlet and also along Old AIA in the low spots.

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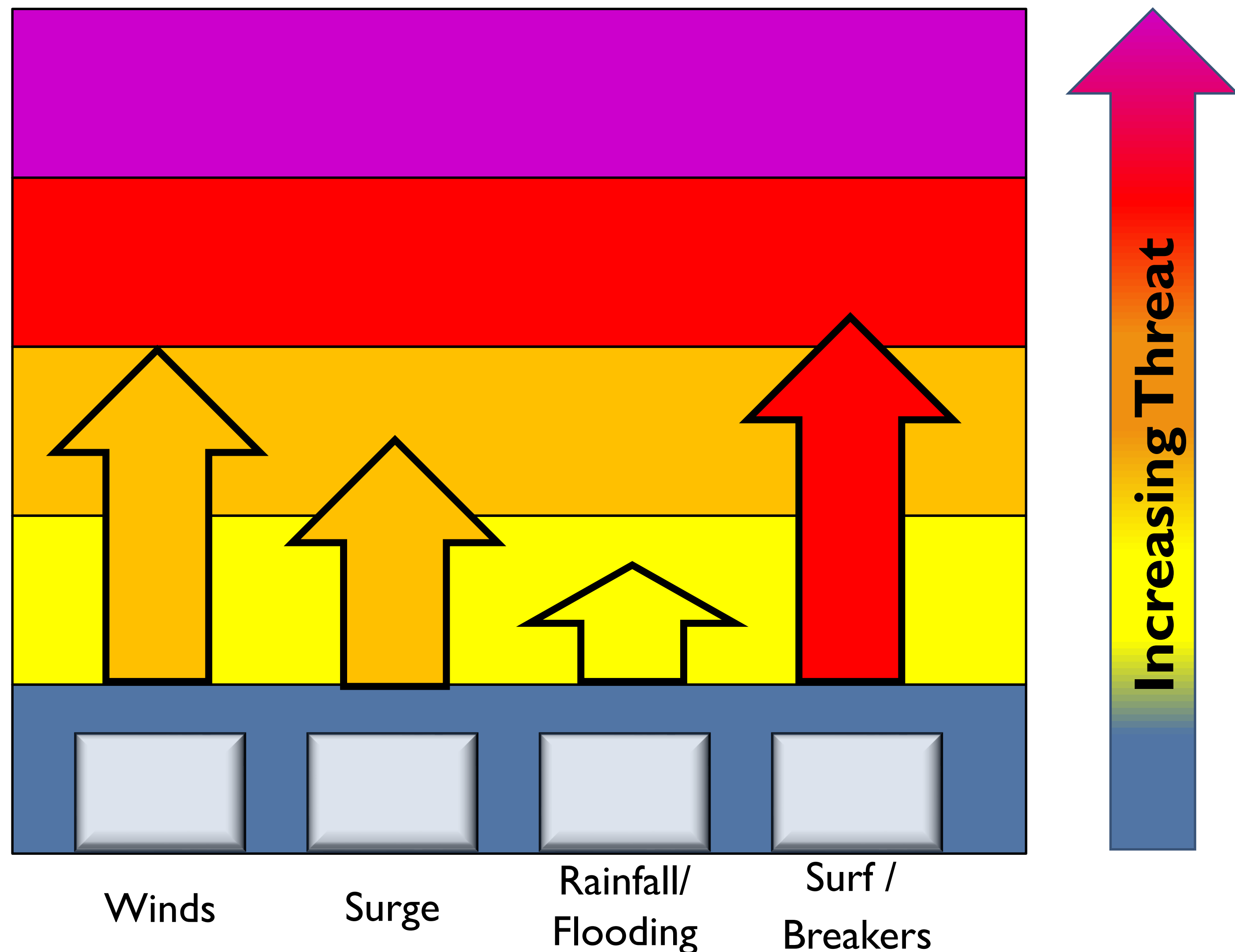


# Threat Level Summary

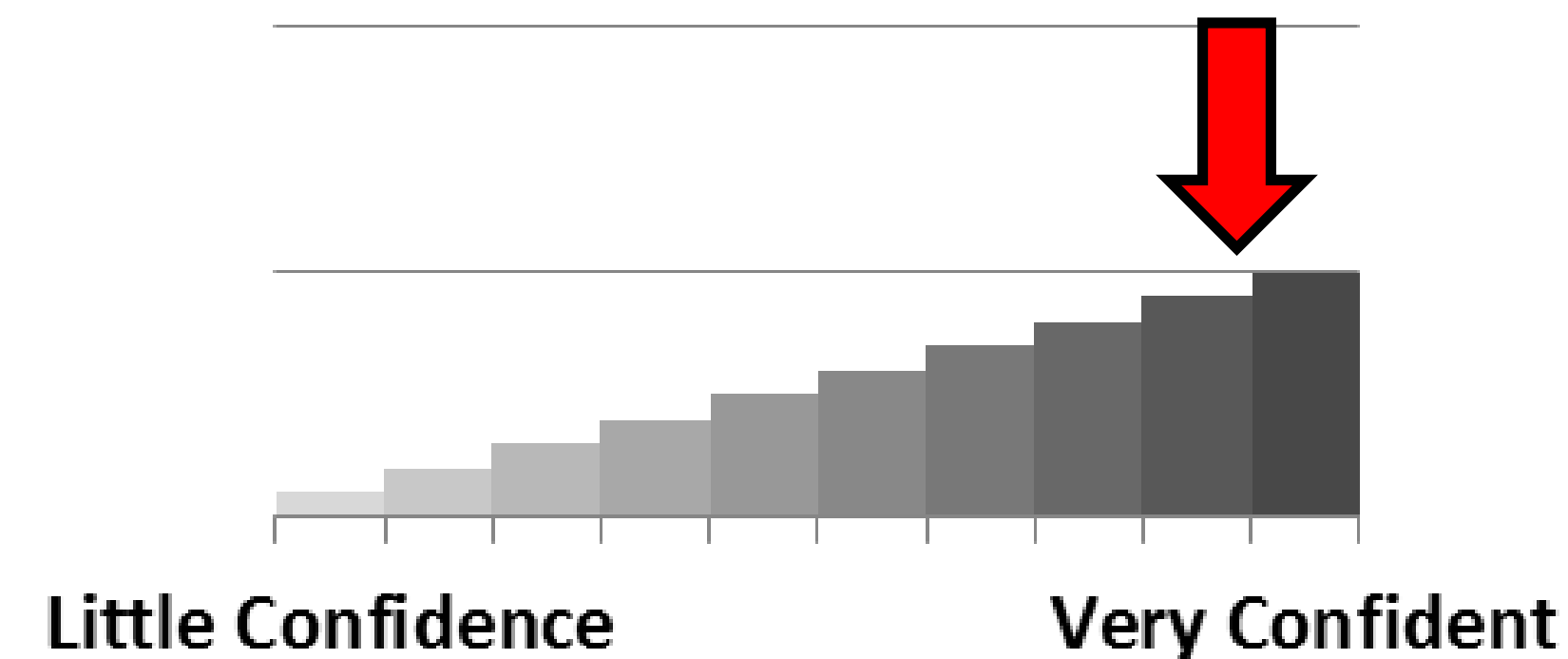
Hurricane Dorian



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## Forecast Confidence



The exact impacts are highly dependent upon track, intensity and wind envelope size. NHC has done a great job with the forecast by now every mile makes a huge difference for impacts.

*For information on specific hazards in this area, please go to*  
<https://www.weather.gov/srh/tropical?office=jax>



# Conclusion Timing

Hurricane Dorian



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## Dorian Conclusion Timing

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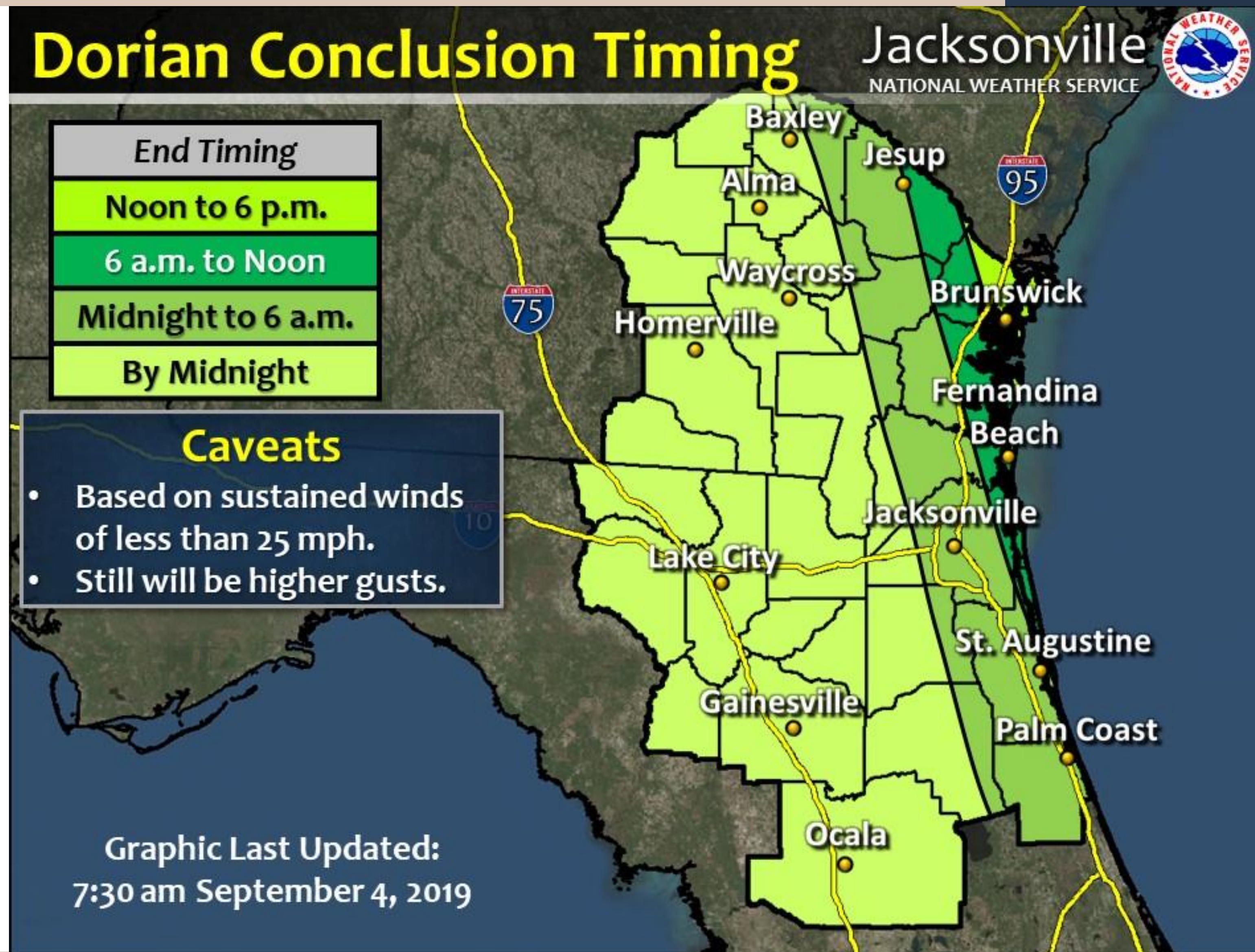


End Timing
Noon to 6 p.m.
6 a.m. to Noon
Midnight to 6 a.m.
By Midnight

### Caveats

- Based on sustained winds of less than 25 mph.
- Still will be higher gusts.

Graphic Last Updated:  
7:30 am September 4, 2019





# Key Take-Aways

Hurricane Dorian



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- **It's still a game of miles.** Exact track and size matter.
- Hurricane force gusts possible for Glynn County.
- Strongest winds will be behind the eye.
- **LOCALIZED** major sound/bay side flooding is possible. Those affected have been personally briefed.
- Large/damaging/life threatening breakers.

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*The Next Briefing Will Be: Wednesday*

*Florida/USN/USMC/USCG 1:20 PM EDT*

*Georgia 2:30 pm EDT*



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*You can always find get the latest graphics and information for this storm at [www.hurricanes.gov](http://www.hurricanes.gov)*



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